Welcome to your new B2B enablement

This document is to guide you through standard mapping requirements for EDI and cXML. Custom mapping is available and can be discussed and implemented after the technical kick off call.

- Identifiers, credentials, shared secrets, URLs, and other connection specific information will be provided after the technical kick off call, during set-up

- Additional protocols we support: XML, xCBL, CSV, EDIFACT, UBL, IDOC, Peppol (please inquire about other supported protocols not listed here)

- Transmission methods we support: HTTPS, SFTP, VAN, AS2, and SMTP
## Contents

<table>
<thead>
<tr>
<th>EDI</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>850 Purchase order</td>
<td>3</td>
</tr>
<tr>
<td>855 Order acknowledgement</td>
<td>5</td>
</tr>
<tr>
<td>856 Shipping notification</td>
<td>6</td>
</tr>
<tr>
<td>810 Invoice</td>
<td>7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>cXML</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase order</td>
<td>10</td>
</tr>
<tr>
<td>Purchase order acknowledgement (POA)</td>
<td>13</td>
</tr>
<tr>
<td>Advanced shipment notification (ASN)</td>
<td>15</td>
</tr>
<tr>
<td>Invoice/credit memo</td>
<td>16</td>
</tr>
</tbody>
</table>
850 Purchase order:
The EDI 850 is a Purchase Order transaction set, used to place an order for goods or services. The EDI 850 generally provides the same information you would find in a paper Purchase Order (PO) document, including:

- Item, prices and quantities ordered
- Shipping details
- Payment terms
- Discounts

Simply accepting an EDI 850 from your trading partner is usually not sufficient for full EDI compliance.

Download the EDI 850 format here.
EDI 850 Format

ISA*01*0000000000*01*0000000000*ZZ*ABCDEFGHIJKLMNOPQRSTUVWXYZJKLMO*ZZ*123456789012345*101127*1719*U*00400*000034380*P>*
GS*PO*4405197800*999999999*20101127*1719*1421*X*004010VICS
ST*850*0000000010
BEG*00*SA*08292233294**20101127*610385385
REF*DP*038
REF*PS*R
ITD*14*3*2*45*46
DTM*002*20101214
PKG*F*68***PALLETIZE SHIPMENT
PKG*F*66***REGULAR
TD5*A*92*P3**SEE XYZ RETAIL ROUTING GUIDE
N1*ST*XYZ RETAIL*9*0003947268292
N3*31875 SOLON RD
N4*SOLON*OH*44139
PO1*1*120*EA*9.25*TE*CB*065322-117*PR*RO*VN*AB3542
PID*F****SMALL WIDGET
PO4*4*4*EA*PLT94**3*LR*15*CT
PO1*2*220*EA*13.79*TE*CB*066850-116*PR*RO*VN*RD5322
PID*F****MEDIUM WIDGET
PO4*2*2*EA
PO1*3*126*EA*10.99*TE*CB*060733-110*PR*RO*VN*XY5266
PID*F****LARGE WIDGET
PO4*6*1*EA*PLT94**3*LR*12*CT
PO1*4*76*EA*4.35*TE*CB*065308-116*PR*RO*VN*VX2332
PID*F****NANO WIDGET
PO4*4*4*EA*PLT94**6*LR*19*CT
PO1*5*72*EA*7.5*TE*CB*065374-118*PR*RO*VN*VX2332
PID*F****BLUE WIDGET
PO4*4*4*EA
PO1*6*696*EA*9.55*TE*CB*067504-118*PR*RO*VN*DX1875
PID*F****ORANGE WIDGET
PO4*6*6*EA*PLT94**3*LR*10*CT
CTT*6
AMT*1*13045.94
SE*33*0000000010
GE*1*1421
IEA*1*000034383

Download the EDI 850 format here.
855 Order acknowledgement:
The X12 855 transaction set is a Purchase Order Acknowledgement. It is used by sellers to confirm the receipt of a purchase order (an EDI 850 transaction) from a buyer, eliminating the need to call or fax a confirmation. The 855 also communicates whether the PO was accepted or rejected, or what changes may have been made to accepted orders by the seller. Thus, like many acknowledgement transactions, the 855 can indicate that the order was accepted, rejected or accepted with changes, as follows:

- Accepted
- Rejected
- Accepted with Changes
  - All line items accepted, change freight or cash terms (i.e., header level changes only)
  - Change or reject one or more line items, no header-level changes
  - Header-level changes, and one or more line items changed or rejected

Each of these may be provided with or without an indication of the product availability. The 855 transaction may also be used to advise a buyer of a pre-arranged merchandise shipment directly from a vendor. The seller will typically transmit an 810 Invoice once the product ships. In some cases, an 856 Advance Shipping Notice (ASN) must be provided ahead of the shipment.

EDI 855 Format
ISA*01*0000000000*01*0000000000*ZZ*ABCDEFHIJKLMNOP*ZZ*123456789012345*101127*1719*U*00400*0
0003438*0*P>*
GS*PR*4405197800*9999999999*20110527*1719*1421*X*004010VICS
ST*855*1001
BAK*00*AC*ABC123*20000430*****20000430
DTM*067*20000507
N1*ST**21*HO1000A0
PO1*10*CA*72.95*CT*UK*50387698433528
ACK*IA*10*CA*067*20000507**UK*50387698433528
PO1*2*25*BX*15.75*CT*UK*30387698775411
ACK*IA*25*BX*067*20000507**UK*30387698775411
CTT*2
SE*10*1001
GE*1*1421
IEA*1*000004438

EDI 855 Specification
This X12 Transaction Set contains the format and establishes the data contents of the Purchase Order Acknowledgment Transaction Set (855) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to provide for customary and established business and industry practice relative to a seller’s acknowledgment of a buyer’s purchase order. This transaction set can also be used as notification of a vendor generated order. This usage advises a buyer that a vendor has or will ship merchandise as prearranged in their partnership.

Download the EDI 855 format here.
856 Shipping notification:

The EDI 856 transaction is more commonly called the EDI Advance Ship Notice or EDI ASN. It is utilized to electronically communicate the contents of a shipment to another trading partner. It is sent in advance of a shipment arriving at the other trading partner’s facility. The 856 ship manifest transaction is commonly used by the retail, manufacturing and automotive industries in response to EDI 850, EDI 830, or EDI 862 transactions. In addition to detailing the contents of a shipment, the EDI 856 transaction includes order information, descriptions of products, types of packaging used, carrier information and more. An EDI ASN may provide information at a variety of levels, including:

- Shipment level information such as tracking numbers and carrier information
- Order level information such as purchase order numbers
- Item level information including items and quantities
- Pack level information such as barcodes printed on each carton

The EDI 856 may be the most complicated document to implement for suppliers. Each trading partner can have very different requirements, which puts the burden on the supplier to support many different formats. The EDI ASN also becomes a data collection issue because of the volume of data points that must be captured and transmitted back to the trading partner. For example, each carton in a shipment may be assigned a unique barcode identifier that must be transmitted back to the trading partner.

EDI 856 Format

```plaintext
ISA*01*0000000000*01*0000000000*ZZ*ABCDEFGHIJKLMNOPQRSTUVWXYZ123456789012345*101127*1719*U*00400*0000034380*0P>
GS*SH*4405197800*999999999*20111206*1045*49*X*004060
ST*856*0008
BSN*14*829716*20111206*142428*0002
HL*1*S
TD1*PCS*2***A3*60.310*LB
TD5*2**XXX**XXX
REF*BM*999999-001
REF*CN*5787970539
DTM*011*20111206
N1*SH*1 EDI SOURCE
N3*31875 SOLON RD
N4*SOLON*OH*44139
N1*OB*XYZ RETAIL
N3*PO BOX 9999999
N4*ATLANTA*GA*31139-0020*SN*9999
N1*SF*1 EDI SOURCE
N3*31875 SOLON ROAD
N4*SOLON*OH*44139
HL*2*1O
PRF*99999817***20111205
HL*3*2I
LIN*VP*87787D*UP*999999310145
SN1*1*24*EA
PO4*1*24*EA
PID**BLUE WIDGET
HL*4*2I
LIN*VP*99887D*UP*999999311746
SN1*2*6*EA
PO4*1*6*EA
PID**RED WIDGET
CTT*4*30
SE*31*0008
GE*149
IEA*1*0000000049
```

Download the EDI 856 format here.
EDI 856 Specification

This X12 Transaction Set contains the format and establishes the data contents of the Ship Manifest/Notice Transaction Set (856) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to list the contents of a shipment of goods as well as additional information relating to the shipment, such as order information, product description, physical characteristics, type of packaging, marking, carrier information, and configuration of goods within the transportation equipment. The transaction set enables the sender to describe the contents and configuration of a shipment in various levels of detail and provides an ordered flexibility to convey information. The sender of this transaction is the organization responsible for detailing and communicating the contents of a shipment, or shipments, to one or more receivers of the transaction set. The receiver of this transaction set can be any organization having an interest in the contents of a shipment or information about the contents of a shipment.

810 Invoice:

The EDI 810 Invoice transaction set is the electronic version of the paper-based invoice document. It is typically sent in response to an EDI 850 Purchase Order as a request for payment once the goods have shipped or services are provided. A vendor will generate an EDI invoice transaction set 810 that commonly contains the following:

- Invoice details such as invoice number and date
- Shipping details
- Payment terms
- Item information including prices and quantities
- Discounts
  - Once an EDI 810 transaction is transmitted, additional EDI documents may be sent in response:
    - EDI 997 Functional Acknowledgement—to confirm receipt of the EDI 810
    - EDI 864 Text Message—to report any business violations detected in the invoice
    - EDI 820 Remittance Advice—to detail the payment of the invoice

Managing EDI invoices, purchase orders and other transactions is easy with EDI/HQ™ advanced EDI software from 1 EDI Source. EDI/HQ™ offers a simple, intuitive interface and a range of tools and features that leaves other EDI software solutions in the dust. Contact 1 EDI Source to arrange a demonstration.
EDI 810 Format

ISA*01*0000000000*01*0000000000*ZZ*ABCDEFHJKLMNO*ZZ*123456789012345*101127*1719*U*00400*0000034
38*0***P>
GS*IN*4405197800999999999*20101205*1710*1320*X*004010VICS
ST*810*1004
BIG*20101204*217224*20101204*P792940
REF*DP*099
REF*IA*99999
N1*ST**92*123
ITD*01*3***0*60
IT1*1*4*EA*8.60**UP*999999330023
IT1*2*2*EA*15.00**UP*999999330115
IT1*3*2*EA*7.30**UP*999999330146
IT1*4*4*EA*17.20**UP*999999330184
IT1*5*8*EA*4.30**UP*999999330320
IT1*6*4*EA*4.30**UP*999999330337
IT1*7*6*EA*1.50**UP*999999330634
IT1*8*6*EA*1.50**UP*999999330641
TDS*21740
CAD*****GTCT**BM*99999
CTT*8
SE*18*1004
GE*1*1320
IEA*1*000001320

EDI 810 Specification

This X12 Transaction Set contains the format and establishes the data contents of the Invoice Transaction Set (810) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to provide for customary and established business and industry practice relative to the billing for goods and services provided.

Download the EDI 810 format here.

Sources: Accredited Standards Committee X12, ASC X12 Standard [Table Data]. Data Interchange Standards Association, Inc., Falls Church, VA. http://www.x12.org
cXML

General cXML integration requirements
All integrations between the vendor and the supplier have specific technical requirements. The following standards are for all integrations; however, please refer to the specific integration for additional requirements.

• All integrations are based on cXML message format standards. Applications must be able to authenticate cXML messages to ensure transactions are secure and to prevent unauthorized access.

• All integrations are required to be encrypted using standard https internet protocol over port 443 by default. Hypertext Transfer Protocol Secure (HTTPS) is a combination of the Hypertext Transfer Protocol with the SSUTLS protocol to provide encryption and secure identification of the server.

• SSL digital certificates must be issued against the same domain as the transactive URL. Certificates that are issued by an internal authority or are self-signed must be provided to the vendor for installation and should be valid for a minimum of three years.

• All cXML documents must not contain byte order marks (BOM) as they cause the vendor parsing failures.

• All integration testing is to be executed in a supplier-designated test environment, separate from the production environment.

• The Supplier DUNS/NetworkID values should remain static across all customer integrations. The client DUNS/NetworkID values will vary by customer.
Purchase order
The supplier will need to provide the vendor with both the test and production URL for message post (HTTP over SSL, port 443) as well as coordinate message authentication credentials. If the URL or credential values change post integration go-live, the supplier must notify the vendor for update.

Successful integration testing per the provided PO Test Plan is required before promotion to production can be considered.

Sample order request message
The following is a sample Order Request message. For details about message elements and attributes, please see the Message Elements table.

```xml
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE cXML SYSTEM "http://xml.cXML.org/schemas/cXU1.2.011/cXML.dtd">
<cXML timestamp="YYYY-MM-DD'T'HH:mm:ssZ" payloadID="[payloadID]" version="1.2.011">
  <Header>
    <From>
      <Credential domain="[From Domain]">
        <Identity>[From Identity]</Identity>
      </Credential>
    </From>
    <To>
      <Credential domain="[To Domain]">
        <Identity>[To Identity]</Identity>
      </Credential>
    </To>
    <Sender>
      <Credential domain="[Sender Domain]">
        <Identity>[Sender Identity]</Identity>
        <SharedSecret>[Shared Secret]</SharedSecret>
      </Credential>
      <UserAgent>[User Agent]</UserAgent>
    </Sender>
  </Header>
  <Request deploymentMode="[test or production]">
    <OrderRequestHeader orderDate="YYYY-MM-DD'T'HH:mm:ssZ" orderID="[PO Number]" type="new" orderType="regular">
      <Total>
        <Money currency="USD">[PO Total]</Money>
      </Total>
      <ShipTo>
        <Address isoCountryCode="[Country Code]" addressID="[Ship To Code]">
          <Name xml:lang="en-US">[Organization Name]</Name>
          <PostalAddress name="default">
            <DeliverTo>[Recipient Data]</DeliverTo>
          </PostalAddress>
          <Street>[Street Address]</Street>
          <City>[City]</City>
          <State>[State Abbreviation]</State>
          <PostalCode>[Postal Code]</PostalCode>
        </Address>
        <Email name="default">[Email Address]</Email>
        <Phone name="work">
          <TelephoneNumber>10</TelephoneNumber>
        </Phone>
      </ShipTo>
  </OrderRequestHeader>
</Request>
</cXML>
```
Download the sample purchase order code as an XML file here.
Purchase order acknowledgement (POA)

In addition to the general requirements outlined above, there may be some requirements specific to the confirmation request integration that is unique to each vendor. Some examples are:

- The supplier DUNS or Network Identity must be the same value as used in other supplier integrations.
- The supplier may be required to download and install the vendor SSL digital certificates.
- All other requirements as listed in the Message Elements Table.

Sample message line detail

```xml
<?xml version= "1.0" encoding= "UTF-8"?>
<!DOCTYPE cXML SYSTEM "http://xml.cXML.org/schemas/cXMU1.2.009/Fulfill.dtd">
<cXML timestamp="YYYY-MM-DD'T'HH:mm:ssZ" payLoadID= "[payloadID]">
  <Header>
    <From>
      <Credential domain="[From Domain]">
        <Identity>[From Identity]</Identity>
      </Credential>
    </From>
    <To>
      <Credential domain="[To Domain]">
        <Identity>[To Identity]</Identity>
      </Credential>
    </To>
    <Sender>
      <Credential domain="[Sender Domain]">
        <Identity>[Sender Identity]</Identity>
        <SharedSecret>[Shared Secret]</SharedSecret>
      </Credential>
      <UserAgent>[User Agent]</UserAgent>
    </Sender>
  </Header>
  <Request>
    <ConfirmationRequest>
      <ConfirmationHeader type="detail" operation="new" noticeDate="YYYY-MM-D D" confirmID="[OrderID in Supplier System]">
        <!--Header level order total, shipping, tax and contact roles must follow cXML standards. Begin ignore
        section-->
        <Total>
          <Money currency="[Currency]">[Order Total]</Money>
        </Total>
        <Shipping>
          <Money currency="[Currency]">[Shipping Total]</Money>
          <Description xml:lang="en">[Shipping Description]</Description>
        </Shipping>
        <Tax>
          <Money currency="[Currency]">[Tax Total]</Money>
          <Description xml:lang="en">[Tax Description]</Description>
        </Tax>
        <Contact role="ShipFrom">
          <Name xml:lang="en">[Supplier Name]</Name>
          <PostalAddress>
            <Street>[Street]</Street>
            <City>[City]</City>
            <State>[State]</State>
            <PostalCode>[Zip Code]</PostalCode>
          </PostalAddress>
          <Phone>
            <TelephoneNumber>13
```
Download the sample purchase order acknowledgement code as an XML file here.
Advanced shipment notification (ASN)

There are three standard Ship Notice Request message operations: "new", "update", and "delete". A request operation of "new" indicates that no previous Ship Notice has been sent for the order, while an operation of "update" implies intent to modify a previously sent Ship Notice message.

Sample single purchase order

The below sample references a single purchase order with multiple line items; both with the same carrier and tracking number. Each referenced line item should be presented in sequential order and correspond to the line number as presented on the original Order Request document.

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<!DOCTYPE cXML SYSTEM "http://xml.cXML.org/schemas/cXMU1.2.009/Fulfill.dtd">
<cXML timestamp="YYYY-MM-DD'T'HH:mm:ssZ" payloadID="[payloadID]">
  <Header>
    <From>
      <Credential domain="[From Domain]">
        <Identity>[From Identity]</Identity>
      </Credential>
    </From>
    <To>
      <Credential domain="[To Domain]">
        <Identity>[To Identity]</Identity>
      </Credential>
    </To>
    <Sender>
      <Credential domain="[Sender Domain]">
        <Identity>[Sender Identity]</Identity>
        <SharedSecret>[Shared Secret]</SharedSecret>
      </Credential>
      <UserAgent>[User Agent]</UserAgent>
    </Sender>
  </Header>
  <Request>
    <ShipNoticeRequest>
      <ShipNoticeHeader noticeDate="YYYY-MM-DD" operation="new" deliveryDate="YYYY-MM-DD" shipmentDate="YYYY-MM-DD" shipmentID="[Supplier's Shipment ID]">
        <!--contact information and service level must follow cSML Standards. Total shipping, and tax are not accepted elements in a ShipNoticeRequest and can be passed only in ConfirmationRequests. Begin ignore section-->
        <ServiceLevel xml:lang="en">[Shipping Type]</ServiceLevel>
        <Contact role="ShipFrom">
          <Name xml:lang="en">[Supplier Name]</Name>
          <PostalAddress>
            <Street>[Street]</Street>
            <City>[City]</City>
            <State>[State]</State>
            <PostalCode>[Zip Code]</PostalCode>
          </PostalAddress>
          <Phone>
            <AreaOrCityCode>[Area Code]</AreaOrCityCode>
            <Number>[Phone Number]</Number>
          </Phone>
        </Contact>
        <!--End ignore section-->
        <Comments>[Header Level Comment]</Comments>
      </ShipNoticeHeader>
      <!--More Ship Notice Details Here-->
    </ShipNoticeRequest>
  </Request>
</cXML>
```
Download the sample advanced shipment notification code as an XML file here.
<Credential>
</To>
<Sender>
<Credential domain="[NetworkID or DUNS]">
<Identity>[Sender Identity]</Identity>
<SharedSecret>[Shared Secret]</SharedSecret>
</Credential>
<UserAgent>[User Agent]</UserAgent>
</Sender>
</Header>
<Request deploymentMode="[production or test]">
<InvoiceDetailRequest>
<InvoiceDetailRequestHeader invoiceID="[Supplier Invoice Number]" purpose="[standard or creditMemo]">
<InvoiceDetailHeaderIndicator />
<InvoiceDetailLineIndicator />
<InvoicePartner>
<Contact role="billTo">
<Name xml:lang="en-US">[Client Name]</Name>
<PostalAddress>
<Street>[Street]</Street>
<City>[City]</City>
<State>[State]</State>
<PostalCode>[Postal Code]</PostalCode>
</PostalAddress>
</Contact>
</InvoicePartner>
<InvoicePartner>
<Contact role="remitTo">
<Name xml:lang="en-US">[Supplier Name]</Name>
<PostalAddress>
<Street>[Street]</Street>
<City>[City]</City>
<State>[State]</State>
<PostalCode>[Postal Code]</PostalCode>
</PostalAddress>
</Contact>
</InvoicePartner>
<!--Supplier ignores data within the InvoiceDetailShipping section. Suppliers have the option to omit the entire element when additional fees are provided at the summary level. If passed, the supplier must provide two contact roles. Providing only a single contact role will generate a failure response. Begin ignore section-->
<InvoiceDetailShipping>
<Contact role="shipFrom" addressID="[Supplier Address ID]">
<Name xml:lang="en-US">[Supplier Name]</Name>
<PostalAddress name="[Supplier Address Name]">
<Street>[Street]</Street>
<City>[City]</City>
<State>[State]</State>
<PostalCode>[Postal Code]</PostalCode>
</PostalAddress>
</Contact>
</InvoiceDetailShipping>
</InvoiceDetailRequest>
</Request>
</InvoiceDetailShipping>
<!--End Ignore Section-->  
<InvoiceDetailPaymentTerm payInNumberOfDays="20" percentageRate="5" />
<InvoiceDetailPaymentTerm payInNumberOfDays="30" percentageRate="0" />
<Comments xml:lang="en-US">[Header Level Comment]</Comments>
<Extrinsic name="[Extrinsic Name]">[Header Extrinsic Value]</Extrinsic>
</InvoiceDetailRequestHeader>
<InvoiceDetailOrder>
<InvoiceDetailOrderInfo>
    <OrderReference orderID="[orderID from Original PO]" orderDate="[orderDate from Original PO]">
        <DocumentReference payloadID="[payloadID from Original PO]" />
    </OrderReference>
</InvoiceDetailOrderInfo>
<InvoiceDetailItem invoiceLineNumber="1" quantity="[Quantity]">
    <UnitOfMeasure>[UOM]</UnitOfMeasure>
    <UnitPrice>
        <Money currency="USD">[Unit Price]</Money>
    </UnitPrice>
    <InvoiceDetailItemReference lineNumber="[Line Number from Original PO]">
        <ItemID>
            <SupplierPartID>[Part Number]</SupplierPartID>
        </ItemID>
        <Description xml:lang="en-US">[Part Description]</Description>
    </InvoiceDetailItemReference>
    <Comments xml:lang="en-US">[Line Level Comment]</Comments>
    <Extrinsic name="CFVALUE_[Client Custom Field Internal Name]">[Extrinsic Value]</Extrinsic>
</InvoiceDetailItem>
<InvoiceDetailItem invoiceLineNumber="2" quantity="[Quantity]">
    <UnitOfMeasure>[UOM]</UnitOfMeasure>
    <UnitPrice>
        <Money currency="USD">[Unit Price]</Money>
    </UnitPrice>
    <InvoiceDetailItemReference lineNumber="[Line Number from Original PO]">
        <ItemID>
            <SupplierPartID>[Part Number]</SupplierPartID>
        </ItemID>
        <Description xml:lang="en-US">[Part Description]</Description>
    </InvoiceDetailItemReference>
    <Extrinsic name="[Extrinsic Name]">[Line Extrinsic Value]</Extrinsic>
</InvoiceDetailItem>